### Competencies

- **1.** Define *functional assessment* and the terminology related to functional assessment.
- **2.** Describe some characteristics of functional decline in older persons.
- **3.** Identify comorbid conditions that might impact negatively on the functional status of an older adult.
- **4.** Assess function using validated tools.
- **5.** Plan strategies to promote/maintain optimal function in older adults.



### Content Outline

### 1. Define functional assessment and the terminology related to functional assessment.

- A. Functional Assessment is a comprehensive evaluation of the physical and cognitive abilities required to maintain independence. Assessment tools provide objective measures of physical health, activities of daily living (ADLs), instrumental activities of daily living (IADLs), and psychological and social functioning.
- B. Activities of Daily Living (ADLs) are the basic daily activities of bathing, dressing, toileting, continence, transfer/mobility, grooming, and feeding.
- C. Instrumental Activities of Daily Living (IADLs) are the basic daily activities needed to live independently in the community—shopping, cooking, using the telephone, doing laundry, housekeeping, managing medications, managing finances, maintaining a home and property, performing duties of employment or volunteer work, and traveling (driving or using public or private transportation systems).
- D. *Psychological Function* is assessed by measuring cognitive mental and affective functions independently. (See Topic 5.)
- E. Social Functioning includes social interactions and resources, subjective well-being and coping, and personenvironment fit.



### Content Outline

## 2. Describe some characteristics of functional decline in older persons.

The incidence of chronic conditions increases with age (arthritis, hypertension, heart disease, hearing impairment, orthopedic impairment, cataracts).

Persons over 65 years of age use approximately one-third of available physician resources, and one-fourth of total medications prescribed, and they constitute more than two-fifths of acute hospital admissions.

In 1990, it was estimated that 7 million older adults in the United States were over age 80, Census Bureau projections estimate that there will be 14 million persons over age 80 in 2025.

By 2020, of the 52 million persons over the age of 65, there are projected to be 5.4 million with severe disabilities and another 5.3 million with moderate disabilities, or a combined total of 22% of the older population.

Functional decline, as measured in Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs), is more prevalent with age (20% of older persons over 65 years require assistance with ADLs; 45% of older persons over 85 years require assistance with ADLs).

## 3. Identify comorbid conditions that might impact negatively on the functional status of an older adult.

- A. Acute illness.
- B. Alterations in nutrition and/or hydration.



### Content Outline

- C. Chronic illness.
- D. Delirium.
- E. Dementia.
- F. Economics.
- G. Environment.
- H. Medications.
- I. Psychiatric comorbidities, especially depression.
- J. Psychological/social stressors.

## 4. Assess function using validated tools. (See Instruments and Scales section of this topic.)

A. *Katz Activities of Daily Living (ADL)*. Measures ability to perform tasks of basic personal care including (see p. 4-7):

Bathing.

Dressing.

Toileting.

Transferring.

Continence.

Feeding.

B. Lawton Instrumental Activities of Daily Living (IADL). Measures abilities associated with living independently in the community including (see pp. 4-8 and 4-9):

Using the telephone.

Shopping.

Food preparation.

Housekeeping.



### Content Outline

Laundry.
Transportation.
Medication.
Managing finances.

C. *PULSES Profile*. Measures general functional performance in mobility and self-care, medical status, and psychosocial factors. The acronym is useful for remembering the components:

P = Physical condition

U = Upper limb function

L = Lower limb function

S = Sensory components

E = Excretory functions

S = Support factors

D. SPICES: An overall assessment tool to flag problems needing further assessment (see page 4–12). The acronym is useful for remembering the components:

S = Sleep disorders

P = Problems with eating or feeding

I = Incontinence

C = Confusion

E = Evidence of falls

S = Skin breakdown

## 5. Plan strategies to promote/maintain optimal function in older adults.

Exercise and physical activity help to prevent heart disease, hypertension, depression, and a tendency toward diabetes. Other recommended strategies for older adults are:



### Content Outline

- A. Schedule regular examinations for prevention and early detection of cancer; prevention of heart disease and stroke; and prevention and treatment of osteoarthritis.
- B. Maintain vaccination status.
- C. Optimize nutritional patterns.
- D. Maintain and enhance mental functioning.
- E. Enhance a sense of independence and productivity.
- F. Maintain and enhance social relationships and support.
- G. Help them access counseling and resources remaking physical modifications to the environment or gaining access to equipment. (Rowe & Kahn, 1998).



### Instruments/Scales

#### KATZ ACTIVITIES OF DAILY LIVING\*

ACTIVITIES Points (1 or 0)	INDEPENDENCE: (1 POINT) NO supervision, direction or personal assistance	DEPENDENCE: (0 POINTS) WITH supervision, direction, personal assistance ortotal care
BATHING  Points:	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genit al area or disabled extremity.	(0 POINTS) Needs help with bathing more than one part of the body getting in or out of the tub or shower. Requires total bathing.
DRESSING Points:	(1 POINT) Gets clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing selfor needs to be completely dressed.
TOILETING Points:	(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
TR ANSFERRING Points:	(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transfer- ring aides are acceptable.	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
CONTINENCE  Points:	(1 POINT) Exercises complete self con- trol over urination and defecation.	(0 POINTS) is partially or totally incon- tinent ofbowel or bladder.
FEEDING Points:	(1 POINT) Gets food from plate into mout h without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.

TOTAL POINTS =	6 = High (patient independent)	0 = Low (patient very dependent)



<sup>\*</sup>Adapted with permission from Gerontological Society of America. Katz, S., Down, T. D., Cash, H. R. et al. (1970). Progress in the development of the index of ADL. *Gerontologist* 10:20–30.

### Instruments/Scales

## LAWTON SCALE FOR INSTRUMENTAL ACTIVITIES OF DAILY LIVING (IADL)\*

Instructions: Start by asking the patient to describe her/his functioning in each category; then complement the description with specific questions as needed.

#### **Ability to Telephone**

- 1. Operates telephone on own initiative: looks up and dials numbers, etc.
- 2. Answers telephone and dials a few well-known numbers.
- 3. Answers telephone but does not dial.
- 4. Does not use telephone at all.

#### **Shopping**

- 1. Takes care of all shopping needs independently.
- 2. Shops independently for small purchases.
- 3. Needs to be accompanied on any shopping trip.
- 4. Completely unable to shop.

#### **Food Preparation**

- 1. Plans, prepares, and serves adequate meals independently.
- 2. Prepares adequate meals if supplied with ingredients.
- 3. Heats and serves prepared meals, or prepares meals but does not maintain adequate diet.
- 4. Needs to have meals prepared and served.

#### Housekeeping

- 1. Maintains house alone or with occasional assistance (e.g., heavy work done by domestic help).
- 2. Performs light daily tasks such as dishwashing and bedmaking.
- 3. Performs light daily tasks but cannot maintain acceptable level of cleanliness.

(Continued)

<sup>\*</sup>The Lawton Scale for Instrumental Activities of Daily Living (IADL) of, M.P. Lawton, "Functional Assessment of Elderly People" from the *Journal of the American Geriatrics Society* 1971; 9(6): 465–481. Reprinted by permission of Blackwell Science, Inc.



### Instruments/Scales

#### LAWTON SCALE (Continued)

- 4. Needs help with all home maintenance tasks.
- 5. Does not participate in any housekeeping tasks.

#### Laundry

- 1. Does personal laundry completely.
- 2. Launders small items; rinses socks, stockings, and so on.
- 3. All laundry must be done by others.

#### **Mode of Transportation**

- 1. Travels independently on public transportation, or drives own car.
- 2. Arranges own travel via taxi, but does not otherwise use public transportation.
- 3. Travels on public transportation when assisted or accompanied by another.
- 4. Travel is limited to taxi, automobile, or ambulette, with assistance.
- 5. Does not travel at all.

#### Responsibility for Own Medication

- 1. Is responsible for taking medication in correct dosages at correct time.
- 2. Takes responsibility if medication is prepared in advance, in separated dosages.
- 3. Is not capable of dispensing own medication.

#### **Ability to Handle Finances**

- 1. Manages financial matters independently (budgets, writes checks, pays rent and bills, goes to bank); collects and keeps track of income.
- 2. Manages day-to-day purchases but needs help with banking, major purchases, controlled spending, and so on.
- 3. Incapable of handling money.

Scoring: Circle one number for each domain. Total the numbers circled. Total score can range from 8–28. The lower the score, the more independence. Scores are only good for individual patients. Useful to see score comparison over time.



### Instruments/Scales

#### SPICES: An Overall Assessment Tool\*

(For nurses to carry in their pockets)

Name	
Age	
Rm	
Date	
Will be d/c to home	NH
VNS	Rehab

SPICES	Yes	No
<b>S</b> leep disorders		
<b>P</b> roblems with eating or feeding		
<b>I</b> ncontinence		
Confusion		
<b>E</b> vidence of falls		
<b>S</b> kin breakdown		

Scoring: If the syndrome screens positive, refer to evidence-based practice protocol.  $\,$ 

Fulmer, Terry T. (1991). The Geriatric Nurse Specialist's Role: A New Mode, *Nursing Management*, 22 (3): 91–93. Lippincott, Williams & Wilkins. Used with permission.



Case Study

See Video Workshop #1 Case Study Marie, 3 Parts, listed in the Resources section of this topic.



### Experiential Activities/ Clinical Experience

1. Home Care Setting. Assess the patient's ability to function in his or her own home and environment. Functional assessment of ADLs and IADLs for older adults should be performed at every home visit. Also perform a functional history and record observations.

At each visit, clients could be asked to self-report changes in their capabilities to carry out any of the specific ADLs and IADLs.

- **2. Acute Care Setting.** Assess the patient's ability to function and compare it to the baseline (i.e., when not acutely ill). The goal is to restore the baseline level of functioning while treating the acute illness.
- **3. Long-Term Care Setting.** Formally assess older adult's ability to function on admission. Reassess at least yearly. Any changes in function should also be noted in monthly evaluations. Students can perform these initial and follow-up assessments at any time (i.e., during the initial visit, a general monthly evaluation, or an episodic visit).
- **4. Personal Experience.** Bind your own leg or arm to replicate functional loss. Perform a functional assessment on yourself with this disability.



### **Evaluation Strategies**

- **1.** Use role playing for evaluation of interviewing techniques and appropriate assessments (with and without a validated tool).
- **2.** Assess knowledge base of appropriate components necessary for a functional history. A student and a preceptor/faculty member could record answers to questions (i.e., independent; needing assistance, and type of assistance; dependent), and compare their documentation for agreement, completeness, and accuracy.
- **3.** Identify resources for obtaining an assessment of an elderly person's pre-acute illness functional status. They might include a long-term care setting: a nurse who transferred the patient; the head nurse of a unit where the patient resided; a social worker on a unit where the patient resided; a physical and/or occupational therapist(s) if patient recently received rehabilitation; if admitted to hospital from home or from an outpatient practice, a partner, relative, neighbor, or social worker; staff at a senior center; health-care provider, or other staff member from patient's health-care provider's office.
- **4.** Plan care for an older adult experiencing functional decline.
- **5.** View videotape (Video Workshop #1 Case Study Marie, 3 Parts, detailed in the Resources section of this chapter). Discuss the role of interdisciplinary team members and how each can contribute to maintaining and improving the functional status of the older person.



#### Resources

Abraham, I., Bottrell, M., Dash, K., Fulmer, T., Mezey, M., O'Donnell, L., and Vince-Whitman, C. (1999, March). Profiling Care and Benchmarking Best Practices in Care of Hospitalized Elderly: The Geriatric Institutional Assessment Profile. In *The Nursing Clinics of North America* (pp. 239–255). Philadelphia: Saunders.

Assessment of the Older Adult. (1996). [Video, Two-part series]. Philadelphia: Lippincott, Williams, & Wilkins.

Beers, M., and Berkow, R. (2000). *The Merck Manual of Geriatrics* (3rd ed.). Whitehouse Station, NJ: Merck and Co.

Binstock, R.H., Cluff, L.E., and Von Mering, O. (1996). *The Future of Long-Term Care: Social and Policy Issues*. Baltimore: Johns Hopkins University Press.

Fulmer, T. (1991). The Geriatric Nurse Specialist Role: A New Model. Nursing Management, 22(3), 91–93.

Fulmer, T. (1993, March/April). Grow Your Own Experts in Hospital Elder Care. *Geriatric Nursing*, 64–66.

Gallo, J.J., Fulmer, T., Paveza, G.J., and Reichel, W. (2000). *Handbook of Geriatric Assessment* (3rd ed.). Gaithersburg, MD: Aspen.

Granger, C.V., Albrecht, G.L., and Hamilton, B.B. (1979). Outcomes of Comprehensive Medical Rehabilitation: Measures of PULSES Profile and the Barthel Index. *Archives of Physical Medicine and Rehabilitation*, 60, 145–154.

Greenberg, S.A., Ramsey, G., Mitty, E., and Fulmer, T. (in press). Elder Mistreatment: Case Law and Ethical Issues in Assessment, Reporting and Management. *Journal of Nursing Law*.

Hanson, C. (1996, January). *Instant Nursing Assessment: Gerontologic*. New York: Delmar.

Kane, R.A., and Kane, R.L. (1981). Assessing the Elderly: A Practical Guide to Measurement. Lexington, MA: Lexington Books.

Kane, R.L., Ouslander, J.G., and Abrass, I.B. (1994). Essentials of Clinical Geriatrics (3rd ed.). New York: McGraw Hill.

Katz, S. (1983). Assessing Self-Maintenance: Activities of Daily Living, Mobility, and Instrumental Activities of Daily Living. *Journal of the American Geriatrics Society*, 31(12).



#### Resources

Katz, S. (1989). Functional Assessment in Geriatrics: A Review of Progress and Directions. *Journal of the American Geriatrics Society*, 37.

Katz, S., Down, T.D., and Cash, H.R. (1970). Progress in the Development of the Index of ADL. *Gerontologist* 10, 20–30.

Kresevic, D., Mezey, M., and the NICHE Faculty. (1999). Assessment of Function: Critically Important to Acute Care of Elders (pp. 1–12). In Abraham, I., Bottrell, M. M., Fulmer, T., and Mezey, Mathy, (Eds.). *Geriatric Nursing Protocols for Best Practice*. New York: Springer Publishing Company.

Lawton, M.P. (1971). The Functional Assessment of Elderly People. *Journal of the American Geriatrics Society*, 19(6), 465–481.

Lueckenotte, A.G. (1990). Pocket Guide to Gerontologic Assessment. Philadelphia: Mosby.

Luggen, A.S. (1996). *Core Curriculum for Gerontological Nursing* (pp. 370–371). St. Louis, MO: Mosby-Year Book.

Maddox, G. et al. (Eds.). (2001). *The Encyclopedia of Aging* (3rd ed.). New York: Springer Publishing Company.

Matteson, M.A., McConnell, E.S., and Linton, A.D. (1997). *Gerontological Nursing Concepts and Practice* (2nd ed.). Philadelphia: Saunders.

Mezey, M., Rauckhorst, L., and Stokes, S. (1993). *Health Assessment of the Older Individual*. New York: Springer.

Mezey, M. et al. (Eds.). (2001). *The Encyclopedia of Elder Care.* New York: Springer Publishing Company.

Rowe, J.W., and Kahn, R.L. (1998). Successful Aging. New York: Pantheon Books.

Shelkey, M., and Wallace, M. (1998, October). Katz Index of Independence in Activities of Daily Living. *Try This*, 1(2).

Wallace, M. and Fulmer, T. (1998). SPICES: An Overall Assessment Tool of Older Adults. *Try This*, 1(1). New York: Hartford Institute for Geriatric Nursing, New York University, Division of Nursing.



#### Resources

#### **Other Resources:**

#### Videotape:

Video Workshop #1 Case Study Marie 3 Parts Center for Assistive Technology at the University of Buffalo. Produced 1992. 20 min., 33 sec; Cost: \$20.

To order, contact Ms. Sarah Fears at

UB/CAT Products 515 Kimball Tower University of Buffalo Buffalo, NY 14214-3079

Phone: 716-829-3141; Fax: 716-829-3217

*NOTE:* This videotape was developed for an audience of physical and occupational therapists, but nursing students benefit from this case study and its content related to functional assessment. The video is a case study of an older woman who demonstrates deteriorating functional status in her home.

